When teaching, each student should be regarded as a unique challenge.

This past fall semester I was assigned to teach Advanced Calculus, one of the University’s most advanced classes in the mathematics curriculum for undergraduates. When teaching a course of this caliber, it is very important to know how to present the information so the students are inclined to discover different aspects of the material on their own, as well as form a proper way of thinking. In light of this, I aimed to provide a very comfortable atmosphere in the classroom so to induce the students to ask questions and become involved. Usually students that are very passionate about mathematics excel in such a course. This passion was challenged through the difficult problems I presented in the homework, lecture, recitation, one on one meetings, office hours and review sessions. I wanted to be sure every student felt prepared to take any upcoming exams by providing opportunities for them to meet with me and discuss any questions they might have.

After having become familiar with these respective students, I began recognizing which of them had further ambitions and truly felt the intensity of the information transmitted in class. These students were inquisitive and sought for advice on how to continue their math endeavors. It was then that I began intently working with these talented students toward something of great demand and prestige: The Putnam competition. This competition is one of the most prestigious mathematics competitions in the US and Canada with over 500 universities competing to place and represent their respective Universities.

Though talented, the students from my Advanced calculus course possessed limited knowledge on how to approach and think about problems presented on this exam. I immediately felt in my element as I began the process of shaping the logic of these students and refining them to face this prospective exam.

Soon, I took action and (with the help of Dr. George Sparling) organized Putnam seminars. Using my expertise and past experiences with training Romanian students for international mathematics competitions, I taught the students different tricks and methods of thinking to solve the problems. Recognizing that each individualformulates and relates thoughts differently, I took the initiative of inviting different professors to lecture and present problems for the purpose of providing new perspective, methods, approaches and ideas. Soon, the transformation of these students became evident as they began to solve the most difficult of problems and elevated to reach a national level concerning mathematics. With the maturity and
experience gained by these student participants, the University of Pittsburgh which ranked in the 300s the past year, moved to position 98 after the training of the Fall 2013 semester. *Le coup de maitre* came in 2015, when Pitt students produced a remarkable performance and the team ranked 24th nationally. For more details, see department’s front page at http://www.mathematics.pitt.edu/node/1773.

I will continue to teach for the Putnam exam after my enjoyable experience with these impressive pupils. This experience is strongly indicative of why I chose to remain in academia. It proves that if you have the right approach to teaching, you can strongly influence the trajectory of a student’s life.

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